

CLAIM SUMMARY DOCUMENT

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Claim 1 (Currently amended) An apparatus for configuring a RAKE receiver with N fingers, the apparatus comprising:

a first stage, the first stage configured to use an input signal to find a set of more than N paths;

a second stage, the second stage configured to use the first set of more than N paths, ~~and the input signal~~ and a quality signal from the RAKE receiver to generate a set of N paths, the second stage generates the set of N paths more frequently than the first stage generates the set of more than N paths; and

a third stage, the third stage configured to use the set of N paths to configure the N fingers of the RAKE receiver.

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Claim 2 (Previously amended) An apparatus as described in claim 1, the first stage configured to use an input signal to find a set of M paths, the second stage comprising M correlators, the second stage configured to use the outputs of the M correlators to generate the set of N paths.

Claim 3 (Currently amended) An apparatus as described in claim 1, the first stage configured to use an input signal to find a set of M paths, the second stage comprising  $3 \times M$  correlators, wherein 3 correlators are assigned to each of the M paths, and the second stage configured to use the  $3 \times M$  correlators to generate M estimates.

Claim 4 (Previously amended) An apparatus as described in claim 3, the second stage configured to use the M estimates to generate a second set of paths.

Claim 5 (Original) An apparatus as described in claim 1, the second stage configured to use the input signal to generate a new set of N paths.

Claim 6 (Original) An apparatus as described in claim 5, the second stage configured to select the new set of N paths from the first set of more than N paths.

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Claim 7 (Previously Amended) An apparatus as described in claim 5, the second stage configured to derive the new set of N paths from the first set of more than N paths.

Claim 8 (Original) An apparatus as described in claim 1, the first stage configured to use an output of a matched filter to generate the first set of more than N paths.

Claim 9 (Original) An apparatus as described in claim 8, the second stage configured to generate a new set of N paths while the first stage is inactive.

Claim 10 (Original) An apparatus as described in claim 8, the second stage configured to generate a new set of N paths while the first stage is active generating a new set of more than N paths.

Claim 11 (Previously amended) An apparatus as described in claim 1, the apparatus further comprising a quality signal, the first stage configured to generate a new set of more than N paths when the quality signal is less than a threshold value.

Claim 12 (Original) An apparatus as described in claim 11, the third stage configured to use paths from the second stage until the first stage generates the new set of more than N paths.

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Claim 13 (Previously amended) An apparatus as described in claim 1, the apparatus further comprising a counter, the first stage configured to generate a new set of more than N paths when the value of the counter is greater than a pre-set value.

Claim 14 (Currently amended) An apparatus for configuring a RAKE receiver, the apparatus comprising:

an input signal;

a searcher, the searcher configured to use the input signal to find a set of candidate paths; and,

a selector, the selector configured to use the input signal, ~~and~~ the set of candidate paths and a quality signal from the RAKE receiver to select a subset of candidate paths that are used to configure the RAKE receiver, the selector configured to generate a new subset of paths while the searcher is inactive.

Claim 15 (Original) An apparatus as described in claim 14, the searcher configured to use the input signal to find a set of M candidate paths, the selector comprising M correlators, the selector configured to use the outputs of the M correlators to generate the subset of candidate paths.

Claim 16 (Original) An apparatus as described in claim 14, the searcher configured to use an output of a matched filter to generate the set of candidate paths.

Claim 17 (Canceled)

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Claim 18 (Original) An apparatus as described in claim 16, the selector configured to generate a new subset of paths while the searcher is active generating a new set of candidate paths.

Claim 19 (Currently amended) An apparatus for configuring a RAKE receiver, the apparatus comprising:

an input signal;

a searcher, the searcher configured to use the input signal to find a set of candidate paths, the set of candidate paths containing M paths; and

a selector, the selector configured to use the input signal, ~~and~~ the set of candidate paths and a quality signal from the RAKE receiver to select a smaller set of candidate paths, the selector comprising  $k \cdot M$  correlators, wherein K correlators are assigned to each

of the selected paths, and the selector configured to use  $k \cdot M$  correlators to generate  $M$  estimates.

Claim 20 (Canceled).

Claim 21 (Currently amended) An apparatus as described in claim 19 ~~20~~, the selector configured to use the  $M$  estimates to generate the smaller set of candidate paths.

Claim 22 (Currently amended) A method for configuring a RAKE receiver, the method comprising the steps of:

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- finding a first set of paths;
- searching the first set of paths to generate a first set of correlation values;
- selecting a second set of paths from the first set of paths based on a second set of correlation values and a quality signal from the RAKE receiver; and
- updating the second set of paths without updating the first set of paths.

Claim 23 (Canceled).

Claim 24 (Original) A method as described in claim 22, further comprising the step of updating the second set of paths while updating the first set of paths.

Claim 25 (Canceled)

Claim 26 (Previously added) A method as described in claim 22, wherein the step of selecting the second set of paths further comprises tracking the first set of paths.

Claim 27 (Currently amended) A method for configuring a RAKE receiver, the method comprising the steps of:

receiving an input signal;

finding a first set of paths;

searching the first set of paths to generate a set of correlation values;

selecting a second set of paths from the first set of paths based on the correlation

values, ~~and~~ the input signal and a quality signal from the RAKE receiver; and

updating the second set of paths without updating the first set of paths.

Claim 28 (Canceled)

Claim 29 (Previously added) A method as described in claim 27, further comprising the step of updating the second set of paths while updating the first set of paths.

Claim 30 (Canceled)

Claim 31 (Previously added) A method as described in claim 27, wherein the step of selecting the second set of paths further comprises tracking the first set of paths.

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